

SAFETY DATA SHEET

According to EC directive 1272/2008 and 2020/878

ARC HH EXPANDING FOAM

Release date: 4/28/2022
Revision Date/No: 3/20/2023 /
Rev.1

SECTION 1. IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

1.1 Product Identifier

Trade Name: ARC HAND HELD EXPANDING PU FOAM

UFI NO: KNSQ-40D1-2114-7V72

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Mixture Uses: Polyurethane foam sealant

1.3 Details of the Supplier of the Safety Data Sheet

Arc Building Products, IDA Business & Technology Park, Ballynattin,
Arklow, Co. Wicklow, Ireland. Y14 A370
T: +353 (0)402 32370 | E: sales@arcbuildingproducts.ie

1.4 Emergency Telephone Number



Emergency Phone Number : +353 (0)402 32370
(Office hours only)

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance/mixture

The mixture meets the criteria for classification in accordance with Regulation (EC) No. 1272/2008.

2.2 Hazards Identification

| | | | |
|---------------------------------|---|---|--|
| Hazard Pictograms: |  GHS08 |  GHS02 | |
| Signal Words: | Danger | | |
| Hazard Statements | H222 H351 H332 H373** H319 H315 H334 | Extremely flammable aerosol. Suspected of causing cancer. Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure. Causes serious eye irritation. Causes skin irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. | |
| Precautionary Statements | P210 P280 P304+P341 P308+P313 | Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Wear protective gloves/protective clothing/eye protection/face protection. IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. IF exposed or concerned: Get medical advice/attention. | |

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| | | |
|--|----------------------------|--|
| | P405 P501 | Store locked up. Dispose of contents/container in accordance with all local and national regulations. |
| | EUH204 | Contains isocyanates. May produce an allergic reaction. |
| For full text of Hazard- and EU Hazard-statements: see SECTION 16. | | |

2.3 Other Hazards

The mixture does not meet the criteria for PBT or vPvB in accordance with the Annex XIII in the Regulation (EC) No. 1272/2008. Based on current knowledge, the mixture does not include greater than 0,1% the ratio of PBT or vPvB substances.

SECTION 3. COMPOSITION ON INGREDIENTS

3.2 Mixtures

General chemical description:

Polyurethan Foam

Base substances of preparation:

Declaration of the ingredients according to CLP (EC) No 1272/2008:

| CAS No. | EC No. | Concentration | Classification |
|---|-----------|---------------|---|
| Diphenylmethane-4,4'- diisocyanate 101-68-8 | 202-966-0 | 5 % ≤ C <25 | Canc.2 ;H351 Acute Tox.4* ; H332 C ≥ %5 STOT Rep. Exp.2 ; H373** Eye Irrit. 2 ;H319 C ≥ %5 STOT Rep. Exp.3 ; H335 Skin Irrit. 2 ;H315 C ≥ %5 Respiratory Sens.1 ;H334 Skin Sens.1 ;H317 C ≥ %0,1 |
| Propane 74-98-6 | 200-827-9 | - | Flammable Aerosol 1 ;H220 |
| Butane 106-97-8 | 203-448-7 | - | Flammable Aerosol 1 ;H220 |
| Dimethyl ether 115-10-6 | 204-065-8 | - | Flammable Aerosol 1 ;H220 |

See the Section 16 for the full text of the H- and P- Statements.

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SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

If exposed or concerned: Get medical advice/attention. Call a POISON CENTER or doctor. Get medical advice if you feel unwell.

Skin Contact: IF ON SKIN: Wash with plenty of soap and water. Get medical advice if you feel unwell. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs: Get medical advice.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms develop and persist, seek medical advice in case of necessity.

Eye Contact: Immediately flush with plenty of water for at least 15 minutes. If eyelids are bonded closed, do not force eye open. Get medical attention.

Ingestion: Consult with a doctor in case swallowing. Rinse mouth.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed. Harmful in contact with skin. Causes serious eye irritation. May cause damage to organs. Causes skin irritation.

4.3 Indication of any immediate medical attention and special treatment needed

See the Section 8.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable extinguishing media: All common extinguishing agents are suitable. Foam, carbon dioxide, dry powder, water spray

Extinguishing media which must not be used for safety reasons: None known.

5.2 Special Hazards Arising From the Mixture

Isocyanate vapors and other irritating or toxic gases may occur during inflammation. In case of exposure to heat the extremely dangerous combustion products like oxides of carbon and nitrogen may occur.

5.3 Advice For Firefighters

Danger of explosion. Keep unnecessary people away, isolate hazard area and deny entry. Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. Do not allow to enter into surface water or drains.

SECTION 6. ACCIDENTAL RELEASE MEASURES

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6.1 Personal Precautions, Protective Equipment and Emergency Procedures

For Non-Emergency Personnel

Use personal protective equipment. Keep children away. Provide ventilation. Keep away from igniting sources. Keep away from naked flame or any incandescent material.

For Emergency Responders

Wear personal protective fireproof clothing.

6.2 Environmental Precautions

Do not empty into drains or water. Disposal of the chemicals must be made according to official regulations.

6.3 Methods and Material For Containment and Cleaning Up

Do not pierce or burn, even after use. Flood with water to complete polymerization and scrape off the floor. Dispose of contaminated material as waste according to Section 13.

6.4 Reference to Other Sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions For Safe Handling

Avoid contact with eyes and skin. Avoid breathing vapor and mists. Do not drink, eat and smoke in the working area. Wash hands thoroughly after handling, Use nitrile gloves and protective glass during handling. Exposure to vapors of heated MDI can be extremely dangerous do not enter closed areas where isocyanate vapors may be gathered.

7.2 Conditions For Safe Storage, Including Any Incompatibilities

Keep in a cool, well-ventilated area in original container. Away from heat, sparks and open flame.
Keep containers closed safely and check periodically in case leakage and spilling.
Protect containers from physical damage.
Carbon dioxide will occur with the moisture contact and this leads pressure increase inside the can.
Keep only in the original container

7.3 Specific end use(s)

Adhesive

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

According to EH 40/2009 WELs:

| EC No. | CAS No. | Component | TWA | STEL |
|--------|---------|-----------|-----|------|
|--------|---------|-----------|-----|------|

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| | | | | |
|-----------|----------|---------------------------------|------------------------|------------------------|
| 202-966-0 | 101-68-8 | Diphenylmetan-4,4'-diisocyanate | 0,02 mg/m ³ | 0,07 mg/m ³ |
| 200-827-9 | 74-98-6 | Propane | 1000 ppm | - |
| 203-448-7 | 106-97-8 | Butane | 600 ppm | 750 ppm |
| 204-065-8 | 115-10-6 | Dimethylether | 400 ppm | 500 ppm |

8.2 Exposure Controls

Appropriate Engineering Controls:

Ensure good ventilation. Apply the all common precautions while working with chemicals. Use explosion-proof electrical/ventilating/lighting equipment. Keep away from heat sparks/open flames/hot surfaces.

Respiratory protection:

In case of dust formation, we recommend wearing of appropriate respiratory protection equipment with particle filter P. This recommendation should be matched to local conditions.

Hand protection:

Wear refractive gloves while working with the hot melt.

Eye protection:

Wear protective goggles

Skin protection:

Wear protective equipment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information On Basic Physical And Chemical Properties

| | |
|---|-------------------------------|
| Appearance | : Aerosol, Liquid |
| Color | : Light Yellow |
| Odor | : Characteristic |
| pH | : Not Applicable |
| Melting/ Freezing Point | : Not Applicable |
| Initial Boiling Point | : Not Applicable |
| Boiling Range | : Not Applicable |
| Flash Point | : Closed/ Pressured Vessel 0° |
| Evaporation Rate | : Not Applicable |
| Flammability of Solids and Gases | : Highly flammable |
| Explosive Limit | : Not Applicable |
| Vapour Density | : Not Applicable |
| Vapour Pressure | : Not Applicable |

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| | |
|--|---|
| Density 25°C | : 22,00 ±3 kg/m ³ |
| Solubility | : Insoluble in water reacts with water. |
| Partition Coefficient (n-octanol/water) | : Not Applicable |
| Auto-ignition temperature | : Not Applicable |
| Decomposition Temperature | : Not Applicable |
| Viscosity | : Not Applicable |
| Explosive Properties | : Not Applicable |
| Oxidizing Properties | : Not Applicable |

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

May polymerized when heated.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

See section reactivity

10.4 Conditions to avoid

Keep away from sunlight and do not expose temperatures above 50°C. Protect containers from physical damage.
Keep away from heat, flame and spark. Do not pierce or burn, even after use.

10.5 Incompatible materials

Carbon dioxide will occur with the moisture contact and this leads pressure increase inside the can. Strongly reacts with active hydrogen and water containing materials

10.6 Hazardous decomposition products

Isocyanate vapors and other irritating or toxic gases may occur during inflammation. In case of exposure to heat the extremely dangerous combustion products like oxides of carbon and nitrogen may occur.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Informations of Toxicological Effects

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Based on available data, the classification criteria are indicated below:

Sensitization:

An allergic reaction cannot be excluded after repeated skin contact.

Corozion/Irritation:

Inhalation: May cause respiratory tract irritation. Exposure to vapors above the established exposure limit results in respiratory irritation, which may lead to difficulty in breathing and tightness in the chest.

Skin Contact: Remove the foam contaminated skin with a clean, dry tissue and clean up with a soft solvent and water, respectively. Use moisturizer in case of irritation.

Eye Contact: Irritating to eyes. Causes excessive tearing. Eyelids may bond.

Ingestion: Consult with a doctor in case swallowing

General Toxicology Information:

| EC No. | CAS No. | Component | Limiting Values |
|-----------|----------|---------------------------------|---|
| 202-966-0 | 101-68-8 | Diphenylmetan-4,4'-diisocyanate | 0,02 mg/m ³ ; TWA 0,07 mg/m ³ ; STEL |
| 200-827-9 | 74-98-6 | Propane | 1000 ppm; TWA |
| 203-448-7 | 106-97-8 | Butane | 600 ppm; TWA 750 ppm; STEL |
| 204-065-8 | 115-10-6 | Dimethyl ether | 400 ppm; TWA 500 ppm; STEL |

Acute Toxicology:

| EC No. | CAS No. | Component | Toxicity |
|-----------|----------|---------------------------------|--|
| 202-966-0 | 101-68-8 | Diphenylmetan-4,4'-diisocyanate | LC50 (rat) : 490mg/m ³ (inh.) |
| 200-827-9 | 74-98-6 | Propane | LC50 (rat) : 658mg/L (inh.) |
| 203-448-7 | 106-97-8 | Butane | LC50 (rat) : 658mg/L (inh.) |
| 204-065-8 | 115-10-6 | Dimethyl ether | LC50 (rat) : 658mg/L (inh.) |

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SECTION 12. ECOLOGICAL INFORMATION

General Ecological Information:

The material is not biodegradable so, do not allow spreading soil, waterways or waste water canal.

12.1. Toxicity

| EC No. | CAS No. | Component | Toxicity |
|-----------|----------|---------------------------------|--|
| 202-966-0 | 101-68-8 | Diphenylmetan-4,4'-diisocyanate | LC50 (rat) : 490mg/m ³ (inh.) |
| 200-827-9 | 74-98-6 | Propane | LC50 (rat) : 658mg/L (inh.) |
| 203-448-7 | 106-97-8 | Butane | LC50 (rat) : 658mg/L (inh.) |
| 204-065-8 | 115-10-6 | Dimetil eter | LC50 (rat) : 658mg/L (inh.) |

12.2. Persistence and degradability

| EC No. | CAS No. | Component | Biodegradable |
|-----------|----------|---------------------------------|-------------------|
| 202-966-0 | 101-68-8 | Diphenylmetan-4,4'-diisocyanate | Not biodegradable |
| 200-827-9 | 74-98-6 | Propane | Not biodegradable |
| 203-448-7 | 106-97-8 | Butane | Not biodegradable |
| 204-065-8 | 115-10-6 | Dimethyl ether | Not biodegradable |

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

Based on current knowledge, the mixture does not include greater than 0,1% the ratio of PBT or vPvB substances.

12.6. Other adverse effects

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

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13.1. Waste treatment methods

If it is possible, try to reuse the mixture. In consultation with the responsible local authority, must be subjected to special treatment. Disposal of the products must be made according to official regulations.

Waste code

According to the directive 2008/98/EC on waste management and the local regulation (02.04.2015 dated- No.29314) the waste code is:

Adhesive: 08 04 09: waste adhesives and sealants containing organic solvents or other dangerous

Package: 16 05 04: gases in pressure containers (including halons) containing dangerous substances

SECTION 14. TRANSPORT INFORMATION

14.1. UN Number

ADR/RID, IMDG, ICA/IATA : UN 1950

14.2. UN Proper Shipping Name

ADR/RID, IMDG, ICA/IATA : AEROSOL, flammable

14.3. Transport Hazard Class(es)

ADR/RID, IMDG, ICA/IATA : 2.1

14.4. Packaging Group

ADR/RID, IMDG, ICA/IATA : 2

14.5. Environmental Hazards

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

14.6. Special Precautions For User

Avoid high temperature.

14.7. Transport In Bulk According to Annex II of Marpol and The IBC Code

Not applicable.

SECTION 15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

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According to EC directive on health and safety precautions while working with chemicals (2009/161/EU) and 2020/878 Directive on Carcinogens or mutagens at work (2004/37/EC) there are no limitations on the products and materials.

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16. OTHER INFORMATION

This document was prepared according to December 13, 2014 dated and 29204 numbered regulations regarding 1272/2008/EC guideline.

| | |
|------------------|---|
| H222 | Extremely flammable aerosol. |
| H351 | Suspected of causing cancer. |
| H332 | Harmful if inhaled. |
| H373** | May cause damage to organs through prolonged or repeated exposure. |
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| P210 | Keep away from heat/sparks/open flames/hot surfaces. — No smoking. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P304+P341 | IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P308+P313 | IF exposed or concerned: Get medical advice/attention. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container in accordance with all local and national regulations. |
| EUH204 | Contains isocyanates. May produce an allergic reaction. |

Chemical Assessment Expert Certificate No. : KDU-A-0-0165)

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